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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,507	03/26/2001	Darryl DesMarteau	CXU-329	8867

7590

07/25/2003

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EXAMINER

LUKTON, DAVID

ART UNIT

PAPER NUMBER

1653

DATE MAILED: 07/25/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,507

Applicant(s)

DESMARTEAU ET AL.

Examiner

David Lukton

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Pursuant to the directives of paper No. 5 (filed 5/8/03), claims 1-19 have been cancelled, and claims 20-47 added. Claims 20-47 are pending.

Applicant's election of Group I is acknowledged, as is the elected specie.

*

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 30, 33, 45 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- It does not appear to be the case that descriptive support exists for claim 30 or 45.

Applicants are requested to cite the pertinent page and line number.

- It does not appear to be the case that descriptive support exists for claim 33.

Applicants are requested to cite the pertinent page and line number.

*

Claims 20-47 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

- In each of claims 20, 25, 32, 35, 37-39, 41-44, 46, 47, a hydrogen atom is missing from each of the amide bonds. In addition, hydrogen atoms are missing from the alpha- amino groups, and indole nitrogen atoms.
- Claim 20 recites that variable "R" can be "aryls" or "aromatic compounds". First, "R" cannot be a compound; instead, "R" is a group, substituent or moiety. Second, it is not clear what the difference is between "aryls" and "aromatic compounds". It is suggested that the latter term be deleted.
- Claim 20 recites that variable "R" can be "heterocyclic compounds". However, "R" cannot be a compound; instead, "R" is a group, substituent or moiety.
- Claim 20 recites the term "sulfur containing alkyls". It is not clear what is encompassed by this. Certainly, thioalkyl moieties and thioethers would be encompassed. But what about sulfones, sulfonamides, sulfenes sulfoxides, dithionates, thioesters, thiocyanates, thioisocyanates, etc. Are all of these encompassed? See also claim 25.
- Claim 20 is drawn to a composition. A composition, however, must have two components. Claim 20 thus mandates the presence of a second component, but at the same time is silent as to what this second component is or should be. Is it a liquid or a solid, and what is the nature of the liquid or solid?
- Claim 33 makes reference to "multiple independent n groups". It is noted that "n" is used in the formula of claim 32 to signify the number of times that the amino acid is "taken", or present. However, it is not clear what is meant by an "n group".

*

The following is a quotation of the appropriate paragraphs of 35 U.S.C §102 that form the basis for the rejections under this section made in this action.

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 31 is rejected under 35 U.S.C. §102(b) as being anticipated by Carr, S. (*Biomedical Mass Spectrometry* 8(2), 51-61, 1981)

Carr discloses (e.g., scheme 1, scheme 2, and fig 8) a peptide that comprises an N-terminal trifluoroethyl group.

Thus, the claim is anticipated.

✱

The following is a quotation of 35 USC §103 which forms the basis for all obviousness rejections set forth in the Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claim 31 is rejected under 35 U.S.C. §103 as being unpatentable over DesMarteau, D. (*Chemical Communications (Cambridge)* (20), 2241-2242, 1998) in view of McDowell (*Biochem* 35, 3328, 1996) or Hoeltzli (*Biochem* 33, 5502, 1994) or Duewel (*Biochem* 36, 3404, 1997).

DesMarteau discloses an N-epsilon trifluoroethyl amino acid (derivative of lysine) and suggests that the compound may be useful for ^{19}F NMR studies. DesMarteau does not disclose amino acids bearing a trifluoroethyl group bonded to the N-alpha position. Each of the secondary references disclose that ^{19}F NMR is a useful technique for gaining information about structure and function of peptides and proteins. None of the secondary references disclose an amino acid bearing a trifluoroethyl group bonded to the N-*alpha* position.

A skilled NMR spectroscopist would thus have been motivated to prepare a peptide which contains an amino acid bearing a trifluoroethyl group bonded to the N-*alpha* position, in order to gain information about the local magnetic environment of the N-terminal amino acid. Thus, the claim is rendered obvious.

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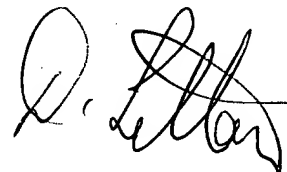
The references on the IDS filed 3/26/01 were stricken because of errors. However, the errors have been corrected on the attached PTO-892.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton whose telephone number is 703-308-3213. The examiner can normally be reached Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, can be reached at (703) 308-2923. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



DAVID LUKTON
PATENT EXAMINER
GROUP 1820